



## UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
10/743,468	12/23/2003	Daniel Litaize	247078US 25 CONT

CONFIRMATION NO. 8050

22850

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
 1940 DUKE STREET  
 ALEXANDRIA, VA 22314



\*OC000000012490099\*

RECEIVED: 4-3004  
 OBLON, SPIVAK, MCCLELLAND  
 MAIER & NEUSTADT, P.C.

## DOCKETING DEPT.

Initials/Date Docketed: WY-3004  
 Type of Resp(s): Resp to NYC  
 Due Date(s): 5-29-04

Date Mailed: 04/29/2004

## Notice Regarding Benefit/Priority Claim(s)

☐ Improper Benefit Claim(s) to Prior-Filed Nonprovisional Application(s)

The benefit claim(s) to prior-filed nonprovisional application(s) is improper because there is no specific reference for each prior-filed application that includes: (1) the identification of the prior-filed application by application number, or international application number and international filing date; and (2) a clear indication the relationship (i.e., continuation, divisional, or continuation-in-part) of the nonprovisional applications. For example, applicant should amend the specification to include a specific reference, such as "This application is a continuation of Application No. 10/---,--- filed ---." in the first sentence of the specification following the title.

Applicant should review each benefit claim submitted and, if appropriate, provide the proper reference to the prior-filed application(s) as required by 37 CFR 1.78. A proper relationship includes an identification of each nonprovisional application as a continuation, divisional or continuation-in-part application of the immediate prior-filed nonprovisional application for which a benefit is claimed under 37 CFR 1.78 in order to establish copendency throughout the entire chain of prior-filed applications. The specific reference must be included in the domestic priority information section of an application data sheet (37 CFR 1.76), or the specification must contain, or be amended to contain, such reference in the first sentence following the title.

**Timeliness:** The required reference for each benefit claim must be filed during the pendency of the instant application and within the later of: (1) four months from the actual filing date of the instant application, or the national stage commencement date if the instant application is a national stage application under 35 U.S.C. 371; or (2) sixteen months from the filing date of the prior-filed application. Failure to timely file the required reference is considered a waiver of any benefit claim, unless a grantable petition to accept an unintentionally delayed claim under 37 CFR 1.78(a), the surcharge set forth in 37 CFR 1.17(t), and the required reference are filed. See 37 CFR 1.78(a).

☐ Improper Benefit Claim(s) to Prior-Filed Nonprovisional Application(s)

The benefit claim(s) to prior-filed provisional application(s) is improper because the instant application was not filed within twelve (12) months from the filing date of the provisional application, and there is no indication of an intermediate nonprovisional application that is directly claiming the



benefit of the provisional application and filed within 12 months of the filing date of the provisional application. For example, applicant should amend the specification to include a specific reference, such as "This application is a continuation of Application No. 10/---,--- filed ---, which claims the benefit of U.S. Provisional Application No. 60/---,--- filed---." in the first sentence of the specification following the title.

Applicant should review each benefit claim submitted and, if appropriate, provide the proper reference to the prior-filed applications (including an indication of any intermediate nonprovisional application that is directly claiming the benefit of the provisional application and filed with 12 months of the filing date of the provisional application) as required by 37 CFR 1.78. The required reference must be included in the domestic priority information section of an application data sheet (37 CFR 1.76), or the specification must contain, or be amended to contain, such reference in the first sentence following the title.

**Timeliness:** The required reference for each benefit claim must be filed during the pendency of the instant application and within the later of: (1) four months from the actual filing date of the instant application, or the national stage commencement date if the instant application is a national stage application under 35 U.S.C. 371; or (2) sixteen months from the filing date of the prior-filed application. Failure to timely file the required reference is considered a waiver of any benefit claim, unless a grantable petition to accept an unintentionally delayed claim under 37 CFR 1.78(a), the surcharge set forth in 37 CFR 1.17(t), and the required reference are filed during the pendency of the instant application.

☐ **Improper Priority Claim(s) to Prior-Filed Foreign Application(s)**

The instant application was not filed within twelve (12) months from the filing date of the prior-filed foreign application, and there is no benefit claim to an intermediate nonprovisional application filed within 12 months of the filing date of the foreign application. Applicant should review each priority claim submitted and, if appropriate, provide the proper reference to any intermediate nonprovisional application filed within 12 months of the filing date of the foreign application in compliance with 37 CFR 1.78, or delete the priority claim. The required reference to an intermediate nonprovisional application must be included in the domestic priority information section of an application data sheet (37 CFR 1.76), or the specification must contain, or be amended to contain, such reference in the first sentence following the title.

**Timeliness:** The required reference for the benefit claim to an intermediate nonprovisional application must be filed during the pendency of the instant application and within the later of: (1) four months from the actual filing date of the instant application, or the national stage commencement date if the instant application is a national stage application under 35 U.S.C. 371; or (2) sixteen months from the filing date of the prior-filed application. Failure to timely file the required reference is considered a waiver of any benefit claim, unless a grantable petition to accept an unintentionally delayed claim under 37 CFR 1.78(a), the surcharge set forth in 37 CFR 1.17(t), and the required reference are filed.

☐ **Benefit Claims to More Than 400 Prior-Filed Applications**

The Office's automated system to record and capture benefit claims is only capable of recording benefit claims for 400 prior-filed applications. Therefore, the Office is unable to generate a filing receipt containing benefit claims for more than 400 prior-filed applications even though applicant is entitled to submit benefit claims for more than 400 prior-filed applications. Accordingly, applicant should not request a corrected filing receipt to include benefit claims for more than 400 prior-filed applications.



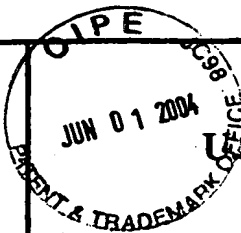
**Prior-Filed Nonprovisional Application has been Improperly Indicated as a National Stage (35 U.S.C. 371) Application**

Applicant submitted a benefit claim to a prior-filed nonprovisional application and improperly indicated that the prior-filed application is a national stage application under 35 U.S.C. 371. The Office's records show that the prior-filed application is an application filed under 35 U.S.C. 111(a). The Office has entered the benefit claim to the prior-filed application as a benefit claim to an application filed under 35 U.S.C. 111(a). Any request for a corrected filing receipt to include the indication that the prior-filed application is a national stage application will not be granted unless applicant supplies evidence that the prior application was in fact a national stage application. Accordingly, applicant should not submit such request without such evidence. Applicant should submit an amendment (or an application data sheet (ADS) if the benefit claim was submitted in an ADS) to delete the indication that the prior-filed application is a national stage application.

For more information and examples on benefit claims, please see Claiming the Benefit of a Prior-Filed Application under 35 U.S.C. 119(e), 120, 121, and 365(c), 1268 Off. Gaz. Pat. Office 89 (March 18, 2003), which is available on the USPTO website at <http://www.uspto.gov/web/offices/com/sol/og/2003/week11/patbene.htm>, and the Manual of Patent Examining Procedure (MPEP) §§ 201.11 and 201.14.

PART 1 - ATTORNEY/APPLICANT COPY

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## U.S. PATENT APPLICATION

SERIAL NUMBER

08/024,803

FILING DATE

03/01/93

CLASS

364

GROUP ART UNIT

2315

APPLICANT

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PASCAL SAINRAT, TOULOUSE, FRANCE.

\*\*CONTINUING DATA\*\*\*\*\*

VERIFIED THIS APPLN IS A CON OF 07/400,113 08/14/89

\*\*FOREIGN/PCT APPLICATIONS\*\*\*\*\*

VERIFIED PCT PCT/FR88/00608 12/09/88  
FRANCE 87.18103 12/14/87

STATE OR  
COUNTRY

FRX

SHEETS  
DRAWING

22

TOTAL  
CLAIMS

1

INDEPENDENT  
CLAIMS

1

FILING FEE  
RECEIVED

\$ 710.00

ATTORNEY DOCKET NO.

B-8910

ADDRESS

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TITLE

PROCESS FOR EXCHANGING INFORMATION IN A MULTIPROCESSOR SYSTEM

This is to certify that annexed hereto is a true copy from the records of the United States  
Patent and Trademark Office of the application as filed which is identified above.

By authority of the  
COMMISSIONER OF PATENTS AND TRADEMARKS

Date

Certifying Officer

200067

Rec'd PCT/PTO

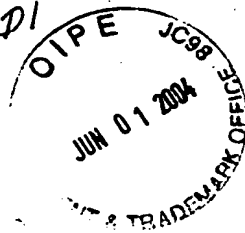
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*Handwritten:*  
This application is a continuation of Serial No. 07/400,113 filed Aug. 14, 1989, which is a continuation-in-part of PCT/FR88/00668 filed Dec. 9, 1988.

PROCESS FOR EXCHANGING INFORMATION  
IN A MULTIPROCESSOR SYSTEM



The invention relates to a multiprocessor system of the type comprising a central memory, treatment processors and cache memories associated with treatment processors. It also relates to a process for the exchange of information between central memory and treatment processors via the cache memory associated with each of these processors. It also provides a new integrated circuit component, capable of equipping the multiprocessor system.

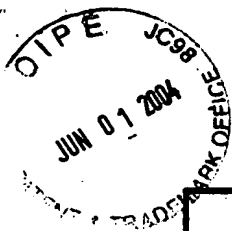
It is known that, in the most common known multiprocessor systems, all the information (data, address) is relayed by a common parallel communication bus between the central memory and the various treatment processors, which constitutes a bottleneck: its transfer rate is in effect insufficient to feed all the processors for full efficiency, from a common central memory.

For increasing the information transfer rate, a first solution consists in associating with each treatment processor a cache memory which, by the <sup>locality</sup> location of the information, permits reducing the demands on the central memory. However, in the case in which the volume of data shared between processors is substantial, the maintenance of coherence of the data between memories generates complementary information traffic on the communication bus which resists a significant reduction of the overall flow on this bus, and <sup>therefore</sup> ~~therefor~~ removes a large part of the interest in this solution.

Another solution consists in providing the communication bus in the form of a grid network designed as a "crossbar", which permits a direct communication between each treatment processor and each subassembly of the central memory (memory bank). However, this solution is very heavy and very costly to achieve because of the very great number of interconnections, and it becomes completely unrealistic beyond about ten treatment processors. Moreover, in the case of multiple demands of several processors on the same memory bank, such a solution implies

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HAROLD H. DUTTON, JR 111 NORTH ALFRED ST P.O. BOX 299 ALEXANDRIA, VA 22313		UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) NOTIFICATION OF ACCEPTANCE OF APPLICATION UNDER 35 U.S.C. 371 AND 37 CFR 1.494 OR 1.495	
		Date of Mailing 08 MAY 1990	
		File Reference B-8910	
IDENTIFICATION OF THE INTERNATIONAL APPLICATION			
International application Number PCT/FR88/00608	International filing date 09 DEC. 1988	Priority date claimed 14 DEC 1987	
Applicant for DO/EO/US LITALZE, DANIEL ET AL			
NOTIFICATION			
<p>The applicant is hereby advised that the United States Patent and Trademark Office in its capacity as a <input checked="" type="checkbox"/> Designated Office, <input type="checkbox"/> Elected Office, has determined that the above identified international application has met the requirements of 35 U.S.C. 371 and 37 CFR <input type="checkbox"/> 1.494, <input type="checkbox"/> 1.495 and is ACCEPTED for national patentability examination in the United States Patent and Trademark Office.</p> <p>The United States Serial Number assigned to the application and the relevant dates are: 07/400113      14 AUG 1989      14 AUG 1989 U.S. NATIONAL SERIAL NO.      35 U.S.C. 102(e) DATE      DATE OF RECEIPT 35 U.S.C. 371 REQUIREMENTS</p> <p><input type="checkbox"/> A request for immediate examination under 35 U.S.C. 371 (f) was received on _____ and the application will be examined in turn.</p> <p><input checked="" type="checkbox"/> No request for immediate examination under 35 U.S.C. 371(f) was received. The application will not be processed or examined before the time limit set forth in either</p> <p><input checked="" type="checkbox"/> PCT Article 23 (Chapter I of the PCT), or <input type="checkbox"/> PCT Article 40 (Chapter II of the PCT) whichever is applicable.</p>			
UNITED STATES DESIGNATED/ ELECTED OFFICE			
ADDRESS ONLY: COMMISSIONER OF PATENTS AND TRADEMARKS Box PCT, Attn. DO/EO/US Washington, D.C. 20231		AUTHORIZED OFFICER B. Carter	

Form PCT/DO/EO/903 (U.S. Version) (April 1987)

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